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To investigate and compare educational and vocational goals of urban youth from rural and non-rural backgrounds, with each other and with their parents and to explore the effect of sex of child, level-of-living, and family size on these goals, 11 schools were randomly selected from predominantly white junior high schools in cities of at least 40,000 population. Questionnaires were administered to 126 9th and 10th grade students and their parents. An analysis of variance of the responses yielded the following major findings: (1) Differences in valuation of education by level of living were not significant, (2) Years of school was related to level of living, (3) Youth with higher level of living communicate better with their fathers regarding educational plans than those with a lower level of living, (4) A larger percentage of boys than girls felt that parents had strongly urged them to continue school, (5) There was close agreement between reality and aspiration in occupational plans, (6) Family size was related to financial help with education, (7) There was no significant difference in the occupational choices according to background of youth, and (8) 60 percent of the fathers held different expectations than those indicated by their children. (DM)

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Educational and Vocational Goals of Rural and Urban Youth In North Carolina

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(Dr. Sperry, who died in November 1966, guided and inspired the Committee during the crucial stages of this project. This report is the fruition of his excellent work.)

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Foreword

This study, North Carolina 1048, "Educational and Vocational Goals of Rural and Urban Youth in North Carolina," was a contributing project to Southern Regional Project S-48, "Educational and Vocational Goals of Rural and Urban Youth in the South." Other states participating in the study included Alabama, Kentucky, Mississippi, South Carolina, Tennessee, and Virginia.

Appreciation is expressed to Dr. Kenneth R. Keller, Regional Administrative Advisor, under whose capable counsel the regional project was conducted; to the Regional Technical Committee of Project S-48 for the establishment of state and regional procedures; to the United States Department of Agriculture, for its advisory role by the Cooperative State Research Service Representative, Dr. Mary Beth Minden; to Dr. Charles Proctor, Consulting Statistician, for assistance with statistical design, procedures, and preparation of the manuscript; and to Mrs. Vira R. Kivett, former Research Instructor, for her work in the initial stages of the project.

Special acknowledgment is given to the school administrators, youth, and parents whose cooperation made this study possible.

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Educational and Vocational Goals of Rural and Urban Youth in North Carolina

Introduction

There has been a considerable migration of rural families into urban areas, according to a study recently conducted in North Carolina (23). The persistence of rural influences on the educational and occupational aspirations of urban youth with rural backgrounds, or on their parents' aspirations for them, has been little studied. Yet this kind of information could be helpful to those working with youth in their efforts to understand the premises used by youth in making educational and vocational plans.

The purposes of the present study were (1) to investigate and compare educational and vocational goals of urban youth from rural and non-rural backgrounds, and the corresponding agreement with parental goals for these youth, and (2) to investigate relationships among selected factors, namely, sex of child, level of living, and family size, associated with similarities and differences in these goals.

Related Research

The most relevant research for the present study is that reported for the recently completed study of the educational and vocational aspirations of rural youth of North Carolina (19) which used identical procedures. Much of this will be mentioned as the results of the present study are presented.

The combined findings from the reports of the four states that cooperated in the earlier rural study (19) are also relevant and will be referred to frequently. In addition, the report of findings from a regional urban youth survey, which will soon be published by the Southern Regional Technical Committee, will provide points of comparison that will be referred to when the results of the present survey are discussed.

Other research has reported differences in educational and vocational goals by rural-urban backgrounds, level of living, sex, and family size. Burchinal (3, 4) found that, generally, lowest levels of educational and occupational aspirations were observed for farm boys and highest levels were observed for metropolitan boys. Similarly, Sewell (16) found that farm boys and girls had the lowest aspirations; village boys and girls had higher aspirations; and urban youth had the highest aspirations. Slocum (17) and Berdie and Hood (2) also reported that a greater percentage of youth from urban areas than from rural areas planned to attend college. Burchinal (3) and Caro and Philbad (5) had findings which indicated that the occupational status aspirations of male high school students from middle and upper classes were significantly higher than those of students from the lower classes. The

close relationship between occupational choice and educational aspirations and expectations has been pointed out by Slocum (17) with socio-economic status having the same relationship with occupational goals as with educational goals. Turner (22) and Morland (14) found that high aspirations of youth were associated with high educational and occupational levels of the breadwinner.

Edlefsen (6) reported that the only child in a family expressed more certainty of entering college than did those having brothers and sisters. Elder (7) noted that the size of the family determines theoretical maximum financial support for each child. From data collected from nearly 3,000 male high school sophomores, Rehberg and Westby (15) concluded that family size was inversely related to the amount of parental encouragement toward children's continuing education beyond high school. Similarly, Turner (22) found that high ambition for education was associated with small family size.

Other studies have also dealt with parent-child agreement on goals. Super (21) concluded from numerous studies that children identify with their parents and their subculture and begin to develop preferences for the types of occupations which their parents value. Steinke and Kaczkowski (20) found that the parents' occupational preferences for their children are important influences upon students' occupational choice and educational plans. In support of this research Bell (1) found that the aspiration levels of male high school students were positively associated with the motivational directives of parents. A further aspect of parental influence has been shown by researchers who have compared differences between fathers' influence and mothers' influence. Burchinal and Jacobson (4) found that more mothers than fathers showed an interest in their children's education. Lee and King (12) concluded that mothers have a greater influence than fathers on the level of occupational choice of girls. In *Project Talent*, Flannagan, *et al* (8) found that educational aspirations of low aptitude high school seniors were lower than those held for them by their parents.

Procedures

Eleven schools were randomly selected from predominantly white public schools with ninth and/or tenth grades, and located in North Carolina cities with populations of 40,000 or more. Students in the selected schools filled out information sheets from which 24 subgroups were developed as a basis for sample selection.[1] Since plans called for an equal number of subjects in each subgroup, the sample was equi-partitioned rather than representative.[2] Except for those students who were not in attendance on the day information sheets were passed out, every student with two parents at home and in a ninth or tenth grade of a predominantly white urban school had a chance to be in the study.

The method of interviewing the sample families was through an initial contact with the student in his school and subsequently reaching his parents through him. Questionnaires were used which were designed to measure students' attitudes toward an education, their educational and occupational plans and vocational preferences.[3] Interviewers administered identical questionnaires to youth and their mothers and fathers. Parents were requested to respond to the educational and vocational questions in the same manner as they hoped that their teenages would answer them.

[1]See Sampling Procedures Appendix A.
[2]Tables of classification types containing the distribution of the sample can be found in Appendix A.
[3]See Appendix B for a more complete description of the questionnaires.

Findings

Analysis of variance has been the basic technique of statistical analysis used with the survey data and a few words of orientation to this mode of presentation may be helpful. It will be recalled that there are four factors: sex of child, rural or non-rural background, high, middle, or low LOL* (level of living) and smaller or larger family size. The variables to be analyzed can be placed into two types: (1) an education valuation score along with the Kuder Vocational Interest scores and (2) several multiple-choice questionnaire items getting at schooling plans, occupations expected, etc. Associated with the measurement of each child on these variables there is a father discrepancy measure and a mother discrepancy measure. These discrepancies reflect the difference between a parent's hopes for the way his child responded and the youth's actual responses.

These two types roughly correspond to a division between numerical versus non-numerical, but this was not intended as the only basis of distinction. Suppose we distinguish between administrative or operational uses versus analytic or theoretical uses. On the one hand we have an administrator who wants to know where he can find personnel for certain kinds of jobs or where he should beam his efforts to instill achievement motivation. On the other hand we have the scientist who asks what causes an aspiration to rise or fall or what is the consequence of a rural background on ambitions.

*LOL will be used throughout this bulletin in referring to level of living.

It would seem that the data of this survey have usefulness to both kinds of interests but if one or the other had been paramount, the method of analysis could have been chosen to reflect it. For the administrator's problem one should draw a map of the incidence of vocational interest over the four-dimensional factor space—outlining the peaks and valleys in red. For the scientist we should first listen to his hypotheses about schooling plans in youth and then construct the appropriate model equation and then, finally, proceed to test his guesses of the model parameters. The method of analysis chosen is a compromise between these two kinds of aims. It is an analysis of variance for the numerical scores and an "analysis of chi-square" for the multiple choice items.

In North Carolina, some 126 youth and their parents were interviewed so the complete description of the way (for concreteness we will take Outdoor interest) scores vary over the 24 types of youth would be to list all 126 score values alongside their combination of factor levels. For example, the five students who were of rural background, high LOL, smaller family and boys had outdoor interest scores of 21, 23, 29, 43, and 44. As a first step in condensing the data these five observations were replaced by their mean, 32.00 in this case, and so also for the other 23 types. Next sums of squares and mean squares for all $2^4-1=15$ effects arising from the factorial arrangement were calculated and compared to the within-cell mean square on 126-24—102 degrees of freedom. Effects with F-ratios that were above 5 percent points and not more complicated than a two-way interaction were deemed worthy of mention in the report. Of the three- and four-way interactions 6.1 percent were found significant at the 5 percent level and so ignoring them would not seem unjustified.

The language used in reporting the differences was chosen to fit whichever of the two aims mentioned above that seemed to be most relevant to the result. For example, changes over the rural versus non-rural factor were generally held to show cause-effect, but changes over the boy-girl factor were more often reported as variations in incidence. We would like to have used LOL and family size as causal factors, but this was made very difficult. In a wider sense, a variable such as a youth's valuation of an education is a result of a family philosophy as well as family size and LOL.

Although the differences in valuation of education by LOL were not statistically significant, there was evidence of a positive association between the two variables. However, the interesting pattern in the data was the difference between the middle and lower LOL groups in the effect of both background and family size on educational values. These results are found in Table 1. Among the middle

Table 1. Educational Values By LOL, Background and Family Size

LOL	Youth Scores Background		Family Size		Mother Minus Child Scores	
	Rural	Non-rural	Smaller	Larger	Smaller	Larger
High	183.78	184.39	184.11	184.06	+ 1.41	+ 8.62
Middle	177.46	190.83	188.38	179.92	+ 5.76	+12.33
Low	179.92	173.58	171.38	182.12	+17.06	− 1.39

level of living children those with non-rural backgrounds placed high values on education, while among the youth in the lower LOL group those with rural backgrounds tended to value education more highly than those with non-rural backgrounds. The high level of living youth showed no difference in value of education by background nor by family size. For family size the middle level of living from a smaller family group showed the highest valuation of education but the large family, low LOL group, was not far behind. The pattern of mother-minus-child averages showed the converse as Table 1 also indicates. Mothers' hopes were greatly in excess of those of their children when the family was smaller and of low LOL and also when the family was larger and of middle LOL. Mean raw scores for girls were much higher than boys' mean raw scores, and fathers' hopes exceeded boys' scores more than fathers' hopes exceeded girls' scores regarding educational attitudes.

Vocational Interests

As a preliminary to exploring variations in vocational preference scores, it may be of interest to examine in Table 2 the average scores by sex of child in the ten interest areas. In Table 2 the average scores have been converted to percentiles separately for boys and girls. For example, the observed grand mean Kuder Vocational Preference Outdoor score for boys was 42.02 and this score value or smaller scores is found in 36 percent of all boys. The girls average was only 32.60 score points; however, such a score or one less is characteristic of 56 percent of all girls.

Roughly speaking, the Science and Social Service scores are high and the Mechanical and Musical scores are low. Boys are low in Outdoor interests and girls are low in clerical interests. Remembering that these data were collected in the mid 1960's and the scores were standardized in the 1950's or earlier these deviations may well represent time changes as well as regional and other influences. Certainly, one must recall that the sample is representative only of a rather artificial equi-partitioned universe of urban North Carolina.

Average differences between parents' hopes and their children's scores are

Table 2. Kuder Vocational Preference Score Averages, Percentile Ranks, and Parents Average Discrepancies By Interest Areas

Interest Area	Kuder Score Averages		Percentile Ranks of Averages		Averages	
	Boys	Girls	Boys	Girls	Father's Hopes Minus Youth Score	Mother's Hopes Minus Youth Score
1 Out	42.02	32.60	36	56	−1.0	−4.5
2 Mech	42.85	20.36	41	42	+2.3	−3.2
3 Comp	25.18	22.69	57	57	+4.8	+3.6
4 Sci	43.31	34.74	57	70	+2.1	− .7
5 Persua	42.35	38.37	62	47	− .3	−3.1
6 Art	26.09	28.98	54	55	−2.0	− .7
7 Lit	16.79	19.73	50	52	+4.2	+3.7
8 Musc	11.51	15.67	44	35	+ .6	+ .9
9 Soc. Ser	41.76	53.80	68	67	−3.2	+ .9
10 Clerk	45.74	54.00	54	39	−1.3	+4.4

shown in Table 3. For example, in both the Computational and the Literary areas parents hoped their children would have more interest than they showed. In other areas, excepting perhaps the Outdoor where there was some agreement, the parents pulled in different directions or exhibited fairly close agreement.

Table 3. Outdoor Interest Scores By Family Size

	Size of Family	
	Smaller	Larger
Students**	33.42	41.19
Fathers minus students**	+ 3.11	— 5.11
Mothers minus students*	— 1.86	— 7.19

*Significant at .05 level
**Significant at .01 level

The distribution of **Outdoor** interest was uneven over the size of family factor with youth from smaller families averaging 8 points below those from larger families. The parents' hopes tend to counteract this difference-being further below their children when they come from larger families. The amount of the discrepancies can be seen in Table 3.

Differences among youth on Mechanical interest score were confined to a large boy-girl difference with parents' discrepancies tending to counteract this difference as is shown in Table 4.

Table 4. Mechanical Interest Scores By Sex of Child

	Boy	Girl
Students*	42.85	20.36
Fathers minus student*	—3.37	8.00
Mother minus student*	—8.23	1.90

*Significant at .01 level

For the **Computational** interest scores none of the main effects of the four factors, not even the boy-girl difference, was significant at the 5 percent level, although there were two two-way interactions. Table 5 shows the relevant mean values. A smaller family size is the site of higher computational interest than a larger one for youth with rural background or low LOL while it is not so for the middle LOL nor non-rural backgrounds.

For **Scientific** interest scores, background and LOL bring about an interaction pattern in which the LOL differences are absent when there is a rural background but show a sharp drop in Scientific interest at the low LOL with a non-rural background. Two other interaction patterns also appear in Table 6.

Table 5. Computational Interest Scores by Family Size, Background and LOL

Family Size	Background		LOL		
	Rural	Non-Rural	High	Mid	Low
Smaller	25.03	23.78	25.12	22.98	25.12
Larger	21.22	25.70	22.45	26.92	21.01

Table 6. Scientific Interest Scores By LOL, Background and Sex of Child

LOL	Students		Father-minus Students		Mother-minus Students	
	Rural	Non-rural	Rural	Non-rural	Boys	Girls
High	38.16	38.83	+6.15	−1.60	+1.67	− .06
Mid	39.30	43.56	+ .28	− .94	−2.56	−4.90
Low	40.93	33.38	− .46	+9.06	−3.66	+5.07
	2-way interaction significant at .05 level		2-way interaction significant at .05 level		2-way interaction significant at .05 level	

Regarding Persuasive interest only the boy-girl difference marred an otherwise uniform level.

Girls show more interest, about 3 score points, in Artistic areas than boys. The girls from small families, however, were about equal in average artistic interest with the boys, while girls from larger families were almost 8 points higher than their counterparts in smaller families, Table 7.

Table 7. Artistic Interest Scores By Sex of Child and Size of Family

	Size of Family*	
	Smaller	Larger
Boys	26.12	26.06
Girls	25.11	32.85

*Significant at .05 level

In regard to the parent-youth discrepancies on artistic interest, the father generally tended to hope for a lower level of artistic preference than youth exhibited. This was more evident for girls of a rural background than for boys of a rural background or for youth of a non-rural background. The pattern of mother's discrepancies was complicated. There was a LOL main effect (middle mothers hoping for more artistic interest than their offspring exhibited and lower mothers hoping for less interest than their offspring exhibited with high LOL mothers about the same) and two-way interactions of all three kinds with sex of child. The middle mothers held far more artistic interest for their daughters than exhibited by their daughters, but only slightly more interest than their sons exhibited. The lower LOL mothers held low artistic hopes for their daughters but not for their sons. Mothers tended to hope for more artistic interest than youth for boys from smaller families and girls from larger families and for boys with non-rural background and girls with rural background.

These patterns are largely a female phenomena—mothers versus daughters on artistic interest. In middle LOL with smaller size families and non-rural background, the mothers had higher hopes than their daughters had artistic interest; but in low LOL with larger families and rural backgrounds, the daughters made the greater expression of artistic interest, Table 8.

Moving into Literary interest the picture is less complicated. While fathers' hopes were far above their sons, 6.58 points, their hopes for their daughters were only 1.77 points above those expressed by their daughters.

Table 8. Mother-Youth Average Discrepancies on Artistic Interest Scores By Sex of Child for LOL, Family Size and Background

	Mother's Hoped For Score Minus Youth's Score						
	LOL			Family Size		Background	
	High	Mid	Low	Smaller	Larger	Rural	Non-rural
Boys	−.94	+0.09	−0.51	− 2.15	+1.25	+1.43	−2.34
Girls	−.07	+4.25	−7.15	−11.42	−3.41	−3.24	+1.26

LOL significant at .01 level.
All two-way interactions significant at .01 level, except LOL-sex interaction which is not significant.

For Musical interest LOL was somewhat of an important factor with the high LOL youth (at 16.59) averaging about 5 score points above the middle (at 11.72) and low LOL (at 12.46). Mothers' discrepancy scores showed a two-way interaction between background and family size in which mothers' hopes for musical interest were excessive with a larger family when there was a rural background but with a smaller family when there was a non-rural background, Table 9.

Table 9. Mothers' Discrepancies on Musical Interest By Background and Family Size

Background	Family Size	
	Smaller	Larger
Rural	−0.94	+2.60
Non-rural	+1.78	−0.13

Significant at .05 level.

One may recall from Table 1 that boys' and girls' Social Service interest scores differed on the average by 12 points. Fathers' discrepancies showed a two-way interaction between sex and background in which the fathers were far below their daughters and slightly above their sons when background was non-rural. With rural backgrounds there was almost no difference. Mothers' discrepancies showed a very similar pattern. In addition, there was a background by family size interaction in which rural background brought mothers' hopes higher than their children in smaller families but lower interest than their children in larger families in Social Service interest, Table 10.

Size of family was an important factor in regard to Clerical interest. Children from smaller families averaged about 9 points above those from

Table 10. Mothers' and Fathers' Discrepancies with Children on Social Service Interest by Background, Sex of Child and Family Size

Background	Sons		Daughters		Mothers' Discrepancies Family Size*	
	Mothers	Fathers	Mothers	Fathers	Smaller	Larger
Rural	+0.85	−1.79	+1.48	− 1.40	+2.38	−0.04
Non-Rural	+5.12	+0.27	−3.96	−10.06	−3.98	+5.14

*Significant at the .05 level

Table 11. Youths' Clerical Interest Scores and Fathers' Discrepancies by Sex of Child and Size of Family

	Youths' Scores*		Fathers' Discrepancies	
	Smaller	Larger	Smaller	Larger
Boys	47.43	44.05	−3.38	+0.29
Girls	60.89	47.12	−7.65	+5.45
Average	54.16	45.58	−5.51	+2.87

*Significant at the .05 level

larger families. This was particularly true of girls for whom the gap was 14 points, while for boys it was 4 points, Table 11.

On the other hand, while LOL seemed to have a positive influence on clerical interest for boys, it was negative for girls, Table 12. Parents' hopes tended to counteract this association with family size. The data on fathers can be seen in Table 11. Mothers' hopes for small-family children were only 1.68 points above the expressed Clerical interests of their children but were 7.10 points above the expressed Clerical interests of larger-family youth.

Table 12. Clerical Interest Scores by Sex of Child and LOL

	LOL		
	High	Mid	Low
Boys	48.82	46.12	42.28
Girls	46.54	58.20	57.27

Significant at the .05 level

Educational and Vocational Plans

Comparisons were made between the responses of youth and the responses which their parents hoped that youth would give in eight categories: (1) planned length of schooling, (2) college and non-college plans, (3) degree of parental urging, (4) financial help for schooling, (5) occupation desired, (6) occupation expected, (7) financial help expected for an occupation, and (8) parents' opinion toward youths' future. The responses of the parent and the child were analyzed in two ways. In some cases there were two response categories, "agree" and "disagree." In other cases, the response of the parent was subtracted from the response of the child making the following three response categories: "child's response more than parent's"; "child's response equal to parent's"; and "child's response less than parent's."

Length of Schooling

Youth were asked how far they expected to go in school, and their parents were asked how far they expected their son or daughter to go in school. Possible responses included: (1) this is probably the last year, (2) another year or two, (3) expect to finish high school, (4) expect to start college, (5) expect to graduate from a four-year college, and (6) expect to continue professional study after college graduation.

Only 2 percent of the students indicated intentions of stopping school within the year or within another

Table 13. Length of Schooling Planned by Students According to LOL

LOL	N	Last Year		Another Year or Two		Finish H. S.		Start College		Graduate College		Prof. Study	
		N	%	N	%	N	%	N	%	N	%	N	%
High	45	—	—	—	—	3	6.7	—	—	28	62.2	14	31.1
Mid	41	—	—	1	2.4	13	31.7	3	7.3	19	46.3	5	12.2
Low	40	1	2.5	—	—	21	52.5	1	2.5	13	32.5	4	10.0

Total N = 126
X^2 Significant at .0005 level

year or two, and only 3 percent of all the students expected to start, but not finish, college. As LOL increased, the number of students planning to graduate from college increased and the number of students planning professional study increased, Table 13. Likewise, as LOL decreased a larger percentage of students indicated plans to terminate their schooling with high school graduation. These findings in North Carolina are in accord with the combined findings of the seven southern states included in this regional research. At all levels of living, regardless of family background or family size, fathers and mothers more frequently than not held expectations similar to those held by youth concerning length of schooling.

Plans — College

Of those youth planning to attend college, 42 percent of the boys and 35 percent of the girls were undecided as to the college they planned to attend. The majority of boys and girls who indicated college preferences were planning to attend non-land grant colleges. The three college courses of study most preferred by boys, in order of preference, were engineering, commerce, and law. Girls most preferred education, commerce, and liberal arts.

Plans — Non-College

Youth who did not plan to attend college were asked about their plans. Parents not expecting their sons or daughters to attend college were asked what they expected them to do. Possible responses included: (1) take training courses before working, (2) take apprentice or on-the-job training, (3) go to work immediately, without further job training, (4) help father in his occupation, business (boys), or marriage after high school (girls), (5) get the military service requirement out of the way before further planning (boys) or help at home (girls), and (6) undecided.

Of the thirty-seven youth who indicated non-college plans, the largest percentage of the boys planned to enter military service, while the largest percentage of girls planned to take a training course. Six percent of the boys planned to help in their fathers' occupations and 5 percent of the girls planned to marry after high school.

Both large and small families had higher percentages of father-child disagreement than agreement; however, the discrepancy was greater for the larger families than for small families.

In an interaction pattern of sex by family background by family size,

there was a high percentage of disagreement between mothers and their children. Boys with non-rural backgrounds from small families and the majority of girls with rural backgrounds from large families agreed with their mothers' non-college plans for the youth. In all other cases, the percentage of mother-child disagreement was higher than the percentage of mother-child agreement regarding non-college plans for the youth.

Parental Urging

Youth were asked to indicate the degree of urging to continue their education beyond high school which they had received from their mothers and fathers. Both parents were asked the amount of urging they had given to sons and daughters. Possible responses for youth and parents included (1) strongly urged to continue, (2) some encouragement to continue, (3) never said much about it, (4) would be better off going to work after high school, and (5) should quit high school and go to work.

Students' perceptions of paternal urging to continue formal education followed the same general pattern as perceptions of maternal urging, Table 14. The majority of boys and girls indicated that both parents had strongly urged them to continue school. A larger percentage of boys than girls felt that parents had strongly urged them to continue, while a larger percentage of girls than boys felt that parents had given only some encouragement. Both sexes indicated strong urging from mothers more frequently than they indicated strong urging from fathers. Ten percent of the boys and 6 percent of the girls reported that their mothers had never said much about it, while 15 percent of the boys and 17 percent of the girls reported that their fathers had never said much about it. Only a very small percent of either sex perceived that their parents wanted them to go to work immediately after high school. None of the students felt that their parents would want them to quit high school.

Over half of the students with rural and with non-rural backgrounds perceived strong maternal urging to continue formal education, Table 15. More non-rural than rural students indicated that their mothers had strongly urged them to continue their education, while more rural students than non-rural students indicated only some encouragement. Twelve percent of the rural students and 44 percent of the non-rural students reported that their mothers had never said much about it. None of the rural students and only 3 percent of the

Table 14. Students' Perceptions of Mothers' and Fathers' Urging by Sex of Student

Sex	N	Strongly Urged		Some Encouragement		Never Said Much		Work After H. Sch.		Quit High School	
		N	%	N	%	N	%	N	%	N	%
Boys' Mothers	61	47	77.0	7	11.5	6	9.8	1	1.6	—	—
Boys' Fathers		44	73.3	7	11.7	9	15.0	—	—	—	—
Girls' Mothers	65	39	60.0	21	32.3	4	6.2	1	1.5	—	—
Girls' Fathers		30	50.8	20	30.8	11	16.9	1	1.5	—	—

Total N=126
Significant at .05 level

Table 15. Students' Perception of Mothers' Urging by Family Background

Family Background	N	Strongly Urged		Some Encouragement		Never Said Much		Work After H. Sch.		Quit High School	
		N	%	N	%	N	%	N	%	N	%
Rural	57	30	53	20	35	7	12	0	0	0	0
Non-Rural	69	56	81	8	12	3	4	2	3	0	0

Total N=126
X^2 Significant of .001 level

non-rural students perceived their mothers as wanting them to work immediately after high school. Neither rural nor non-rural students felt that their mothers wanted them to quit high school.

At all three levels of living there was a high percentage of students perceiving strong maternal uring to continue formal education. The higher the LOL the larger the percentage of youth perceiving strong urging. Eighty-two percent of the high LOL youth indicated strong urging while only 48 percent of the low LOL youth made this indication. There was a reverse order concerning the category, "some encouragement." At the low LOL 43 percent of the youth chose this category. Fifteen percent of the middle LOL youth reported that their mothers had never said much about it, while only 8 percent of the low LOL youth and 2 percent of the high LOL youth reported this. Only 2 percent of the youth from the high LOL and from the low LOL reported that their mothers felt they would be better off going to work after high school. None of the middle LOL students perceived this.

As LOL increased there was a higher percentage of father-child agreement concerning paternal encouragement of education. Seventy-eight percent of the fathers and children at the high LOL had equal perceptions of the amount of urging fathers had given, 55 percent had equal perceptions at the middle LOL, and 50 percent at the low LOL had equal perceptions. At all levels of living, there was a higher percentage of cases in which youth perceived more encouragement than there was of cases in which youth perceived less encouragement than their fathers felt that they had given.

In an interaction pattern of family size and sex of the youth, the majority of the boys and girls had the same perceptions of their fathers' encouragement of education as their fathers felt that they had given. For boys from small families, there was no difference in the percentage of youth who perceived more encouragement and the percentage of youth who perceived less encouragement than the amount that fathers felt they had given. Boys from large families differed somewhat in their perceptions. Twenty-nine percent perceived more urging than fathers felt they had given while 11 percent of the boys from large families perceived less urging than fathers felt they had given. For girls from small families the discrepancy was greater. Only 3 percent perceived less urging, while 41 percent perceived more urging than fathers reported giving. There was a reverse for girls from large

families, but the difference in percentages was not so great as that for girls from small families. Twenty-four percent of the girls from large families perceived less urging while 15 percent perceived more urging than the amount fathers felt they had given.

Regardless of family background or family size, the majority of mothers and youth agreed on the amount of maternal encouragement that had been given toward youths' continuing formal education. There was a high percentage of mother-child agreement for those with non-rural backgrounds from large families and for those from rural backgrounds and small families. In cases where there were differences in perceptions there were large percentages of cases in which the youth perceived more maternal urging than mothers indicated that they had given. The largest percentage of youth holding higher perceptions of maternal urging than mothers felt they had given were non-rural youth from small families. There was little difference according to family background or family size in cases of children having lower perceptions of maternal urging than mothers felt they had given.

Financial Help for Schooling

Youth and their parents were asked how financially able the family would be to help in youths' continued schooling after high school. Responses included: (1) financially able to pay way completely, (2) financially able to help a great deal, (3) financially able to give some help, (4) financially able to give no help, and (5) the family would be in such condition that some of the youth's earnings would be needed by the family.

A much higher percentage of girls than boys expected parents to pay completely for youths' continuing their schooling, while a much higher percentage of boys than girls expected parents to give them only some financial help for education. Thirty-one percent of the boys and 29 percent of the girls expected their parents to help a great deal. Only small percentages of either sex indicated that their parents could give no financial help. No girls and only 1 percent of the boys felt that their parents would need financial help from the youths' earnings.

It is not surprising that the higher the LOL the larger the percentages of youth expecting complete financial help from parents toward education. Fifty-three percent of the high LOL youth expected complete help, while only 21 percent of the low LOL youth expected complete financial help from parents. Twenty-nine percent of both the high LOL youth and the low LOL youth indicated that parents would help a great deal toward financing an education. Thirty-two percent of the middle LOL youth indicated this expectation. For the categories, "give some help" and "give no help," percentages of youth reporting these expectations increased as LOL decreased. Forty-two percent of the low LOL students expected only some help from parents, while only 16 percent of the high LOL students expressed this expectation. No students at the high LOL or at the low LOL felt their parents would need financial help from them. Two percent of the middle LOL youth indicated that they would need to give their parents financial assistance.

At the high LOL, 60 percent of the fathers and youth had equal estimates concerning the amount of financial help parents were able to give toward the continued schooling of youth. Twenty-seven percent at the middle LOL and 29 percent of the fathers and youth at the low level held equal

estimates. Forty-two percent of the middle LOL youth, 37 percent of the low LOL youth, and 22 percent of the high LOL youth estimated more financial help than fathers indicated they could give. There were 34 percent of the low LOL youth, 32 percent of the middle LOL youth, and 18 percent of the high LOL youth who estimated less financial help than fathers indicated they could give.

Higher percentages of youth from small families than from large families expected parents to pay completely or to help a great deal financially with the youths' continued education. Forty-one percent of the youth from large families and only 18 percent of the youth from small families expected only some financial help from parents. There were small percentages of youth from both large and small families who reported that parents could give no help for continued education of the youths. None of the youth from small families and only 2 percent of the youth from large families felt that parents needed financial assistance from them.

In an interaction of family background and family size, the largest percentage of youth indicating that parents could give complete financial assistance with education were non-rural youth from small families, Table 16. The largest percentage expecting parents to help a great deal were rural youth from small families. Of all background-family size combinations, a much larger percentage of youth with rural backgrounds from large families expected parents to give only some financial help. Eleven percent of the rural youth from small families and only 4 percent of the rural youth from large families expected no financial help from parents. None of the non-rural youth from small families and only 3 percent of the non-rural youth from large families felt that parents could give no financial help.

Occupation Most Desired

Youth were asked to name the occupation most desired to follow. Their parents were asked to indicate the occupation they would like for their sons or daughters to consider.[4]

Seventy-one percent of the boys desired occupations classified as professional, 14 percent desired occupations classified as craftsmen, and 5 percent chose clerical or sales occupations. The three classifications most frequently mentioned by girls were professional — 68 percent, clerical — 20 percent, and service — 7 percent.

[4]Occupations were classified under broad categories according to the census occupational breakdown.

Table 16. Students' Financial Help Expected with Schooling by Interaction of Family Background and Family Size

Family Background	Family Size	No.	Pay Completely		Help Great Deal		Give Some Help		Give No Help		Need Help from Child	
			N	%	N	%	N	%	N	%	N	%
Rural	Small	28	6	21.4	15	53.6	4	14.3	3	10.7	0	0
Rural	Large	27	8	29.6	3	29.6	15	55.6	1	3.7	0	0
Non-Rural	Small	35	20	57.1	8	22.9	7	20.0	0	0	0	0
Non-Rural	Large	34	11	32.4	11	32.4	10	29.4	1	2.9	1	2.9

Total N = 124
X^2 Significant at .01 level

As LOL increased, the percentage of youth preferring occupations of a professional nature increased. Eighty-eight percent of the youth at the high LOL, 64 percent at the middle LOL and 52 percent at the low LOL chose occupations in this classification. Twenty-two percent of the middle LOL youth and 18 percent of the youth at the low LOL chose occupations of a craftsman nature. Twelve percent of the youth at the low LOL desired occupations classified as service occupations. None of the youth at the other levels of living chose those occupations.

Seventy-four percent of the students and fathers agreed on occupations desired for students at the high LOL, 72 percent at the middle LOL, and 46 percent at the low LOL. It follows that percentage of father-child agreement varied proportionately with LOL.

Occupation Expected

Youth were asked to indicate the kind of lifetime occupation that they actually expected to follow. Similarly, their parents were asked the type of occupation they actually expected their son or daughter to follow. The majority of the boys and of the girls expected to enter occupations of a professional nature. The second most frequently chosen occupations were craftsmanship for boys and clerical for girls. Third in line of occupations most often selected by youth were clerical occupations by boys and occupations of a service nature by girls.

According to LOL, occupations that youth actually expected to enter followed the same pattern as occupations youth desired to enter. Percentages varied only slightly with the most obvious change occurring in the percentage of middle LOL youth who actually expected to enter professional occupations, Table 17. This change was 5 percent less than the percentage of middle LOL youth desiring to enter professional occupations.

The majority of the boys and girls at all levels of living expected to enter professional occupations. From high to low LOL the following percentages of boys expected to enter professional occupations: 91, 67, and 50. In the same order, percentages of girls expecting to enter professional occupations were 84, 53, and 57. Sales and craftsmanship occupations were the only other occupations chosen by high LOL boys, and only 5 percent chose each of these. The second most frequently expected occupation of both middle and low LOL boys was that of craftsmen. Second to professional occupations, girls at the high and middle levels of living expected to enter clerical occupations. At the low LOL the second most frequently expected occupation for girls was service work.

As with desired occupations, the percentage of father-child agreement, concerning expected occupation for the child, increased as LOL increased. The percentages of disagreement were greater for expected occupation than for desired occupation for the child, with the greatest change occurring at the middle LOL. Only 28 percent of the middle LOL youth and fathers disagreed on desired occupation, while 44 percent disagreed on occupation actually expected for the child.

Financial Help Expected for Boys' Occupations

Boys were asked how much financial help they felt they would receive from their family in regard to getting a start in the occupation they had chosen. Parents were asked how much financial help would be available for

Table 17. Expected Occupation of Youth by Level of Living

LOL	N	Prof. Technical	Farmer	Manager	Clerical	Sales	Craftsman	Operatives	Private Household Work	Service	Farm Labor	Other Labor	Homemaker
						Percentages							
High	40	87.5	—	—	5.0	5.0	2.5	—	—	—	—	—	—
Mid	32	59.4	—	—	25.0	3.1	12.5	—	—	—	—	—	—
Low	30	53.3	—	—	10.0	3.3	20.0	—	—	13.3	—	—	—

Total N=102

X^2 Significant at .005 level

their son's occupational plans. Possible answers included: (1) all the financial help needed, (2) most of the financial help needed, (3) some of the help needed, (4) very little of the help needed, and (5) no financial help would be available. There were no significant relationships regarding financial help expected by sons and that which parents expected to provide for their son's occupational plans; however, most of the boys expected to receive some financial help from parents. Only 10 out of 61 boys expected very little or no help.

Parents' Opinion Toward Youths' Future

Boys and girls were asked what their parents thought of their occupational plans, and parents were asked their opinion of their children's plans. Possible answers included: (1) shooting too high, (2) it's a good occupation, (3) it would be better to try something different, (4) it's up to the child to make the choice, and (5) never discussed it. Only 1 percent of the girls and none of the boys indicated that parents thought the youth were shooting too high. Forty-eight percent of the boys and 64 percent of the girls reported that their chosen occupation was considered by their parents as a good choice. A larger percentage of boys than girls reported that their parents wanted them to try something different. A much larger percentage of boys than girls indicated that they had never discussed occupational choice with parents. About the same percentages, 25 percent of the boys and 30 percent of the girls, indicated that their parents thought their occupational choice was up to them.

At the high LOL, the percentage of girls who had the same perceptions of their fathers' opinions as the fathers indicated was much higher than the percentage of boys at the high LOL who had the same perceptions of their fathers' opinions as indicated by the fathers. For boys, as LOL increased, the percentage who agreed with fathers' opinions decreased. The reverse was true for girls. As LOL increased, the percentage of girls who agreed with fathers' opinions increased. Answers of fathers and youth were related to an interaction of sex, LOL, and family size. Because a three-way interaction diversifies a small sample to the point of misleading percentages, this interaction will not be discussed herein.

Girls, more frequently than boys, had perceptions of mothers' opinions equal to the opinions mothers indicated having toward the occupations chosen by the youth. Sixty-six percent of the girls and their mothers agreed while only 38 percent of the boys and their mothers agreed.

When asked their opinion regarding career and marriage preparation for their daughters, nearly all of the parents felt that girls should be prepared for both an occupation and marriage. As in the survey of rural youth (19), girls perceived their parents' feelings and there was very little parent-daughter disagreement regarding value placed on preparation for marriage and a career.

Discussion

Classification cells were small, with as few as three subjects per cell, as indicated in Table 18 (see Appendix). In this regard, the reader may feel that this study in North Carolina is weak because it is not advisable to generalize from such a small sample. However, findings are supported in many cases by a regional cooperative study in which North Carolina was a contributor. This enforces the findings of the state study, thus justifying generalizations. In the following discussion, similarities and differences between state findings and regional findings will be discussed. Because of the small numbers per cell, both numbers and percentages have been shown in tables when possible in order to avoid misleading information.

Contrary to the results of a recent study of goals of rural youth in North Carolina (19), there were few significant differences in educational and vocational interests according to LOL of urban youth in the present study. One of the most marked differences concerning LOL was found in replies to a question about the length of schooling students anticipated. At both the state and regional levels, the higher the LOL the higher the percentage of students planning to graduate from college and undertake professional study. Likewise, as LOL decreased, there were higher percentages of students planning to terminate their schooling with high school graduation.

In North Carolina, as well as in the regional study, father-child agreement concerning encouragement of education varied with percentages of agreement decreasing from high to low levels of living. This pattern of agreement might be interpreted to mean that higher LOL youth are communicating better than lower LOL youth with fathers in regard to educational plans.

A larger percentage of boys than girls felt that parents had strongly urged them to continue school. One might wonder whether or not boys are under more pressure than girls. Both sexes more frequently indicated perceptions of strong urging from mothers than from fathers. Findings are supported by those of the region. This raises the question whether mothers exert more pressure than fathers do toward youths' continuing education.

In North Carolina, more non-rural than rural youth indicated that their mothers had strongly urged them to continue their education. Differences were not significant at the regional level. The rural background appears to depress the amount of urging by mothers. At both state and regional levels larger percentages of non-rural than rural youth expected parents to pay completely for continued education.

Regarding the amount of financial help youth expected from parents toward schooling, findings in North Carolina were consistent with those of the southern region. A higher percentage of girls than boys expected parents to pay completely for their education, while a higher percentage of boys than girls expected a great deal of parental help toward financing their education. This could be an indication that boys felt the responsibility of partially sharing the expense of education.

Exemplifying a degree of realism, more youths from the high LOL than from the middle and low LOL expected "complete" financial help from parents for schooling while more children from the middle and low

levels than from the high LOL expected only "some" help. Very few children at any LOL felt that their parents would give "no help." This may be indicative of the fact that parents today make every effort to help their children obtain a formal education.

When asked the occupation they desired and the occupation they actually expected, there was very little difference in the two answers of youth. Since one would suppose that the "desired" occupation would be indicative of aspirations while the "expected" occupations would represent reality, the respondents show close agreement between reality and aspirations. In North Carolina, 66 percent of the girls and 71 percent of the boys expected to enter professional-technical occupations. This finding was also true for the regional study in which about 70 percent of the youth expected to enter occupations classified as professional-technical. Even at the low LOL, 53 percent of the youth actually expected to enter professional-technical occupations. This is considered extremely high when taking into account the fact that only 11 percent of the total urban labor force in the 1960 census belonged to the professional-technical category.

Regarding youths' chosen occupations, 48 percent of the boys and 64 percent of the girls felt that their parents regarded their choices as "good." Percentages were quite similar in the regional study. Also, following the regional trend, more boys than girls in North Carolina reported having never discussed occupational plans with parents.

On the Attitudes Toward Education questionnaire (9) girls' scores were significantly higher than boys' scores indicating that girls had more favorable attitudes than boys toward formal education. Both parents had higher educational hopes for their children than the youth indicated having.

On the Kuder Preference vocational questionnaire boys' scores were significantly higher than girls' scores in the following interest areas: outdoor, mechanical, scientific, persuasive. Girls' scores were significantly higher than boys' scores in the artistic, musical, social service, and clerical areas of interests. Although boys' scores were slightly higher than girls' scores in the computational area, and girls' scores were slightly higher than boys' scores in the literary area, differences were not significant. These findings followed the trend evidenced in the larger regional study; however, in the regional study, differences in boys' scores and those of girls on the Kuder questionnaire were significant in all ten areas of interest, with the exception of the persuasive area.

Of those youth not planning to attend college, boys most often planned to enter military service while girls most often planned to work. In the regional study, the largest percentage of boys and girls who did not plan college attendance planned to take training courses. There was a large percentage of boys included in the regional study who planned to enter military service, thus supporting this finding in North Carolina; however, only 7 percent of the girls in the regional study planned to work immediately.

Concerning occupational and educational plans of youth and those held for them by parents, the one significant variation in answers according to family size was in regard to financial help with education. Certainly, when considering research related to family size (6, 7) it is understandable that family size would cause answers to vary where financial help is questioned. In support of

regional findings, a larger percentage of North Carolina youth from small families than from large families expected "complete" financial help from parents toward education.

One would expect family size to be related to youths' answers in regard to length of schooling planned, college plans, and parental urging of education. This was neither the case in North Carolina, nor in the regional study. One possible explanation could be the criterion used for designating family size as large or small. In this study a family of one or two children was considered small, while a family of three or more children was considered large. Perhaps a better measure would have been one defining a large family as a family consisting of four or more children.

There was little difference between state and regional scores on the Kuder Preference Record. North Carolina boys had average scores slightly higher on persuasive and social service interests and slightly lower scores on musical interests than those in the regional study. In comparing girls' scores, the girls in North Carolina had mean scores slightly above those of regional girls in the scientific area, and slightly below those of regional girls in artistic and clerical areas. None of the discrepancies were greater than 2.2.

Findings in North Carolina supported by those in the southern regional study indicated a need for vocational guidance in schools. Youth seem to be aware of educational requirements in order to qualify for desired occupations, but a number of youth and parents are not aware of financial aid available toward enabling a youth to complete a desired education. There is also a need for better parent-child communication regarding plans for the child's future. Schools can be expected to go only so far with vocational and educational direction. A child needs to know what he can expect from his parents and, in turn, parents need to be aware of the desires and expectations of their children. Youth should be encouraged to talk with parents about plans for the future. Parents should be made aware of the pressures on today's youth, and encouragement should be given parents toward understanding and helping youth with decisions regarding their future.

In order to determine whether or not youths' interests differ according to residential background it is helpful to compare interests expressed concerning school and occupational plans of boys and girls included in the present study of urban youth and those expressed by boys and girls included in the earlier study of rural youth (19). In discussing similarities and differences, scores of urban youth with rural backgrounds and urban youth with non-rural backkgrounds will be combined and this group will be referred to as "urban youth." The youth included in the earlier study will be referred to as "rural youth."

The value placed on education was almost the same for both rural and urban youth according to their scores on the educational questionnaire. Rural youth had slightly higher mean scores of 179.88 for boys and 186.19 for girls as compared to mean scores of urban boys and girls which were 178.57 and 184.19, respectively. Keeping in mind that the study of rural youth was three years earlier than the study of urban youth, it is surprising that the emphasis on education is not evidenced by higher scores indicative of more interest in the later study. This presents a question as to whether or not a comparison of such scores obtained during the same

period would show rural youth to hold an even higher value than urban youth hold regarding education.

LOL was related to length of schooling anticipated by both groups of youth. In both cases the majority of the high LOL youth planned to graduate from a four-year college. Whereas the largest percentage of middle LOL urban youth expected to graduate from a four-year college, the majority of the middle LOL rural youth planned to terminate their formal education with high school graduation. Most of both rural and urban youth at the low LOL expected to graduate from high school only; however, the percentage of urban youth with such plans was only 52 percent as compared to 82 percent of the rural youth holding such plans.

Engineering was the college course of study most preferred by both urban and rural boys. The difference which might be accredited to residential background appeared in the second and third preferences. For urban boys these choices were commerce and law, while for rural boys, these choices were agriculture and physical and biological sciences. Urban and rural girls had the same preferences except that commerce was one of the three most preferred courses of urban youth, whereas nursing was chosen by many of the rural girls.

Of those urban and rural boys not planning to attend college, the greatest percentage chose to fulfill their military service requirement before further planning. This is not surprising when one considers the present-day emphasis on fulfillment of military obligations.

Youth from urban and rural backgrounds had similar perceptions of parental urging toward continuing formal education. Most of the students indicated that parents had strongly urged them to continue school and many of the students felt at least some parental encouragement toward this. None of the boys and girls indicated that their parents would want them to quit school.

Although LOL was directly related to the percentage of urban and rural youth expecting complete financial help with schooling, higher percentages of urban youth than rural youth indicated such expectations. Whereas rural youths' expectations toward parental financial help with schooling might be considered moderate, urban youths' expectations might be considered liberal.

Boys in the urban study chose professional, craftsman, and clerical and sales occupations, while those boys included in the rural study chose professional, farming, and craftsman occupations. Such differences might be expected of youth from urban and rural areas; however, it is interesting to note that there was no significant difference in the occupational choices according to background of youth in the present study. In this case, the influence of a rural background did not carry over in the occupational choices of boys who had moved to urban areas. Urban girls most often selected the same three occupations as the girls included in the rural survey.

The majority of urban boys at all three levels of living expected to enter professional occupations. This was the case for the high LOL rural boys, but not for middle and low LOL rural boys. Many of these youth chose farming and operative work, two selections which none of the urban boys made. Perhaps the rural youth were being more realistic than urban youth regarding their expected occupations. One evidence of this is the

high percentage of disagreement between urban fathers and their children at the low LOL. Fifty-three percent of these youth indicated expectations of entering professional occupations and 60 percent of the fathers held different expectations than those indicated by their children.

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APPENDIX A

Sampling Procedures

Data were collected over the school years 1964-65 and 1965-66. In order that each state's data would constitute a replication in the total regional project, procedures established by the Technical Committee were followed as closely as possible. In each city in which schools had been selected to be included in the study, an interviewer was hired and trained by a field interviewer. Most of the interviewers were guidance counselors or teachers.

School and Student Samples

In North Carolina eleven schools from which sample students were drawn were randomly selected from predominately white public schools teaching ninth and tenth grades and serving cities with populations of 40,000 or more. In nine of the schools student information sheets including Gough's Home Index Scale (9) were administered in the classroom to all ninth and tenth grade students attending school on that day. If a student was living with both parents he became subject to being selected. Information sheets on these students from all 11 schools were then grouped and seven students (to allow for the necessary six plus one to compensate for possible non-response) were randomly selected from each of the 24 subgroups. In two of the city school systems permission could not be obtained to administer information sheets in the classrooms. Names of sample students were randomly drawn from lists of ninth and tenth graders furnished by school personnel.

The 24 sub-groups were formed by a cross-classification of the two sexes, three levels of living, two family sizes and two backgrounds—rural and nonrural. The sample was thus equipartitioned rather than proportionally representative and was to have 144 cases. Because of a high rate of refusal and a number of cases in which youth were not living with both parents, the final number of cases in North Carolina was 126. Table 18 shows the number of completed interviews in each classification type. As can be noted, the smallest number of participants in any classification type was three, Table 18.

Parent Sample

Both mothers and fathers of the youth composing the 24 classification types were included in the study. Ages of the fathers ranged from 20-29 to 60-69 years, with the largest percentage falling into the category of 40-49 years. Mothers' ages ranged from 30-39 to 60-69 with the largest percentage also being in the 40-49 year-old category.

Fathers' educations ranged from the category of "0-5" years through the category of graduate study. Mothers' educations ranged from the category of "6-8" years through that of graduate study. The largest percentage of fathers and mothers had ended their formal education with high school. Eleven percent of the fathers and 10 percent of the mothers had completed college.

Parent occupations were classified according to the occupational categories used by the Census Bureau. The three occupational categories describing the largest percentage of fathers were: (1) Craftsmen, foremen, and kindred workers; (2) Professional, technical, and kindred workers; and (3) Sales workers.

Table 18. Classification Types and Number in Sample

Classification type	Level of Living	Background	Family Size	Sex	No. of Cases
1	High	Rural	Small	Boy	5
2	High	Non-rural	Small	Boy	7
3	High	Rural	Large	Boy	4
4	High	Non-rural	Large	Boy	7
5	High	Rural	Small	Girl	4
6	High	Non-rural	Small	Girl	6
7	High	Rural	Large	Girl	5
8	High	Non-rural	Large	Girl	7
9	Middle	Rural	Small	Boy	4
10	Middle	Non-rural	Small	Boy	5
11	Middle	Rural	Large	Boy	5
12	Middle	Non-rural	Large	Boy	6
13	Middle	Rural	Small	Girl	5
14	Middle	Non-rural	Small	Girl	7
15	Middle	Rural	Large	Girl	4
16	Middle	Non-rural	Large	Girl	5
17	Low	Rural	Small	Boy	6
18	Low	Non-rural	Small	Boy	5
19	Low	Rural	Large	Boy	3
20	Low	Non-rural	Large	Boy	4
21	Low	Rural	Small	Girl	5
22	Low	Non-rural	Small	Girl	5
23	Low	Rural	Large	Girl	7
24	Low	Non-rural	Large	Girl	5

Sixty-seven percent of the mothers were homemakers not gainfully employed. Of those gainfully employed, the main three categories were: (1) Clerical and kindred workers; (2) Professional, technical, and kindred workers; and (3) Operatives and kindred workers.

APPENDIX B

Measurement

Because permission could not be obtained to administer questionnaires, other than the Student Information Sheets, in the schools, home interviews included students as well as parents. The purpose of the first visit to the home was to introduce the study, acquire parental cooperation, and arrange for an appointment at which time questionnaires could be administered to parents and their child selected to participate in the study. During this visit, parents were requested to complete an information sheet giving such demographic information as number of years of school completed, age, and occupations.

The second visit to the home involved administering schedules concerning educational attitudes and vocational goals and preferences. The youths' educational attitudes and attitudes parents hoped the youths held toward education were assessed through the use of the Hieronymous Attitudes Toward Education Questionnaire (11). This instrument, developed upon the principle of summated rating, is a test of attitudes concerning the value of an education. Youths' vocational and educational plans and the plans parents hoped the youths would have were obtained from a questionnaire constructed by the Technical Committee for the regional study. Items on this schedule included: (1) length of schooling, (2) plans—college, non-college, (3) degree of parental urging, (4) degree of financial help with schooling, (5) occupation desired, (6) occupation expected, (7) parents attitude toward plans, (8) parents' opinion of plans, and (9) degree of financial help available for starting an occupation.

On the third visit to the home, parents and youths were asked to complete the *Kuder Preference Record* (14). This instrument was used to assess the vocational interests of youths, and of the interests parents hoped that youths expressed. The following ten broad areas of preference are measured by the *Kuder Preference Record*: Outdoor, Mechanical Computational, Scientific, Persuasive, Artistic, Literary, Musical, Social Service, and Clerical.

The field interviewer was responsible for the acquisition of student data and for the selection and training of a parent interviewer from the selected community. The parent interviewer, recommended by the superintendent, the principal, or guidance counselor, was supplied with a detailed manual and oriented by the field interviewer.

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Bulletins of this station will be sent free to all citizens who request them.